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July 6, 2019

Joseph Laydon
Town Planner
Grafton Municipal Center
30 Providence Road
Grafton, MA 01519

EXHIBIT 8

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gravesengineering.com
RECEIVED

Subject: 11 Wheeler Road
Preliminary Plan and MRDSP Review

JUL - 8 2019

Dear Joe:

**PLANNING BOARD
GRAFTON, MA**

We received the following documents in our office on June 7, 2019:

- Plans entitled Preliminary Conventional Development Plan, 11 Wheeler Road dated April 23, 2019 and revised May 30, 2019, prepared by Andrews Survey & Engineering, Inc. for Stanley W. & Lisa A. McGriff. (4 sheets)
- Plans entitled Preliminary Flexible Development Plan, 11 Wheeler Road dated April 23, 2019 and revised May 30, 2019, prepared by Andrews Survey & Engineering, Inc. for Stanley W. & Lisa A. McGriff. (4 sheets)
- Bound document entitled Major Residential Special Permit & Preliminary Plan, 11 Wheeler Road, Grafton, MA dated April 23, 2019 and revised June 5, 2019, prepared by Andrews Survey & Engineering, Inc. for Stanley W & Lisa A McGriff.

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with applicable "Rules and Regulations Governing the Subdivision of Land; Grafton, Massachusetts" revised through April 27, 2009; "Grafton Zoning By-Law" amended through October 15, 2018 and standard engineering practices. GEI was authorized to proceed with this review on June 20, 2019. As part of our review, GEI visited the site on July 5, 2019.

Our comments follow:

Zoning By-Law

Flexible Development Plans

1. If access to the open space parcel is to be provided from the proposed road, then during definitive plan design the "Proposed Stormwater Mitigation Area" will need to be configured to create an access strip at least forty-feet wide. (§5.3.11.c)

Both Conventional and Flexible Development Plans

2. The site is predominantly located within the Water Supply Protection Overlay District. During definitive plan design, consideration should be given to incorporating infiltration systems for roof runoff into the project's stormwater management system. (§7.5.D).

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Subdivision Rules & Regulations

Both Conventional and Flexible Development Plans

3. The plans need to contain a legend with all line-types and symbols used in the plans. (§3.2.3.1)
4. During definitive plan design, the type of curb material will need to be addressed. Where the road grade exceeds 2%, vertical granite curbing is required. Whereas the road is proposed to be 22 feet wide, consideration should be given to utilizing sloped granite edging (except at intersection radii) so that if necessary, emergency vehicles can gain access to the road shoulders to pass an obstruction in the road. (§4.2.1.2.b)
5. During definitive plan design, hydrant locations will need to be coordinated with the Grafton Fire Department and Grafton Water District. (§4.7.7.1)
6. The plans do not address the stormwater collection system in a preliminary manner. It appears that the intention is to use a conventional catch basin-to-manhole configuration; the design engineer needs to elaborate. (§4.7.8.3)

General Engineering Comments

Both Conventional and Flexible Development Plans

7. We reviewed the Sight Distance and Speed Data memorandum prepared by WSP. The methodology appeared to be in order and the memorandum recommended tree clearing along the property frontage. GEI observed during its site visit that brush trimming will also be needed to clear obstruction sight lines. Specific tree and brush clearing locations and requirements should be incorporated into the definitive plans.


General Comments

Flexible Development Plans

8. On Sheets C-1.1 and C-1.2, the Lot Requirements table needs to be updated to reflect the latest lot area and lot frontage information, and the reference to Lot 7 needs to be deleted.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Graves Engineering, Inc.



Jeffrey M. Walsh, P.E.
Principal

cc: Travis Brown, Andrews Survey & Engineering, Inc.